OIPE

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  5         Escobedo, Jaime
  6         Williams, Lewis T
  8 <120> TITLE OF INVENTION: ENDOGENOUS RETROVIRUSES UP-REGULATED IN PROSTATE CANCER
 10 <130> FILE REFERENCE: 002441.00008
 12 <140> CURRENT APPLICATION NUMBER: 10/016,604
 13 <141> CURRENT FILING DATE: 2002-09-10
 15 <150> PRIOR APPLICATION NUMBER: 6,0251,830
 16 <151> PRIOR FILING DATE: 2000-12-07
 18 <160> NUMBER OF SEQ ID NOS: 225
 20 <170> SOFTWARE: PatentIn version 3.1
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 23 <211> LENGTH: 89
 24 <212> TYPE: DNA
 25 <213> ORGANISM: Homo sapiens
 27 <400> SEQUENCE: 1
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 29 caggtgtgta ggggcaaccc acccctaca                                        89
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 33 <211> LENGTH: 560
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 40 tatgacctta cccccaaccc cgtgctctct gaaacatgtg ctgtgtccac tcagggttaa     180
 41 atggattaag ggcggtgcag gatgtgcttt gttaaacaga tgcttgaagg cagcatgctc     240
 42 cttaagagtc atcaccactc cctaatctca agtacccagg gacacaaaaa ctgcggaagg     300
 43 ccgcagggac ctctgcctag gaaagccagg tattgtccaa cgtttctccc catgtgatag     360
 44 cctgaaatat ggcctcgtgg gaagggaaag acctgaccgt cccccagccc gacacccgta     420
 45 aagggtctgt gctgaggagg attagtaaaa gaggaaggaa tgcctcttgc agttgagaca     480
 46 agaggaaggc atctgtctcc tgcctgtccc tgggcaatgg aatgtctcgg tataaaaccc     540
 47 gattgtatgc tccatctact                                                 560
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 52 <212> TYPE: DNA
 53 <213> ORGANISM: Homo sapiens
 55 <400> SEQUENCE: 3
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 57 gtaaagcact gagatgttta tgtgtatgca tatctaaaag cacagcactt aatcctttac     120
 58 attgtctatg atgcaaagac ctttgttcac atgtttgtct gctgacccctc tccccacaat    180
 59 tgtcttgtga ccctgacaca tccccctctt cgagaaacac ccacagatga tcagtaaata    240
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ENTERED

RAW SEQUENCE LISTING   DATE: 09/18/2002
PATENT APPLICATION: US/10/016,604   TIME: 09:54:41

Input Set : A:\SEQUENCE LISTING.ST25.txt
Output Set: N:\CRF4\09182002\J016604.raw

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72 attgtctatg atgcaaagac ctttgttcac atgtttgtct gctgaccctc tccccacaat    180
73 tgtcttgtga ccctgacaca tcccctctt cgagaaacac ccacagatga tcagtaaata    240
74 ctaagggaac tcagaggctg gcgggatcct ccatatgctg aacgctggtt ccccgggtcc    300
75 ccttcttct ttctctatac tttgtctctg tgtcttttc ttttccaaat ctctcgtccc     360
76 accttacgag aaacacccac aggtgtgtag gggcaaccca cccctaca                 408
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87 tatgacctta cccccaaccc cgtgctctct gaaacatgtg ctgtgtccac tcaggttaa     180
88 atggattaag ggcggtgcag gatgtgcttt gttaaacaga tgcttgaagg cagcatgctc    240
89 cttaagagtc atcaccactc cctaatctca agtacccagg gacacaaaaa ctgcggaagg    300
90 ccgcagggac ctctgcctag gaaagccagg tattgtccaa cgtttctccc catgtgatag    360
91 cctgaaatat ggcctcgtgg gaagggaaag acctgaccgt cccccagccc gacacccgta    420
92 aagggtctgt gctgaggagg attagtaaaa gaggaaggaa tgcctcttgc agttgagaca    480
93 agaggaaggc atctgtctcc tgcctgtccc tggcaatgg aatgtctcgg tataaaccc     540
94 gattgtatgc tccatctact gagatagga aaaaccgcct tagggctgga ggtgggacct     600
95 gcgggcagca atactgcttt gtaaagcact gagatgttta tgtgtatgca tatctaaaag    660
96 cacagcactt aatcctttac attgtctatg atgcaaagac ctttgttcac atgtttgtct    720
97 gctgaccctc tccccacaat tgtcttgtga ccctgacaca tcccctctt cgagaaacac    780
98 ccacagatga tcagtaaata ctaagggaac tcagaggctg gcgggatcct ccatatgctg    840
99 aacgctggtt ccccgggtcc ccttcttct ttctctata                           879
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124 agaatgaggc tattgaacaa gtaagggcta tttgcctcag ggcctgggga aaaattcagg    420
125 acccaggaac agctttccct attaattcaa ttagacaagg ctctaaagag ccatatcctg    480
126 actttgtggc aagattacaa gatgctgctc aaaagtctat tacagatgac aatgcccgaa    540
127 aagttattgt agaattaatg gcctatgaaa atgcaaatcc agaatgtcag tcggccataa    600
128 agccattaaa aggaaaagtt ccagcaggag ttgatgtaat tacmgaatat gtgaaggctt    660
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130 tcactctagg aggacaagtt agaacatttg ggaaaaaatg ttataattgt ggtcaaatcg    780
131 gtcatckgaa aaggagttgc ccaggcttaa ayaarcagaa tataataaat caagctatta    840
132 cagcaaaaaa taaaaagcca tctggcctgt gtccaaaatg tggaaaagca aaacattggg    900
133 ccaatcaatg tcattctaaa tttgataaag atgggcaacc attgtctgga aacaggaaga    960
134 ggggccagcc tcaggccccc caacaaactg gggcattccc agttaaactg tttgttcctc   1020
135 agggtttttca aggacaacaa cccctacaga aaataccacc acttcaggga gtcagccaat   1080
136 tacaacaatc caacagctgt cccgcgccac agcaggcagc accgcagtag atttatgttc   1140
137 cacccaaatg gtcttttttac tccctggaaa gcccccacaa aagattccta gaggggtata   1200
138 tggcccgctg ccagaaggga gggtaggcct ttgagggaga tcaagtctaa atttgaaggg   1260
139 agtccaaatt catactgggg taatttactc agattataaa gggggaattc agttagtgat   1320
140 cagctccact gttccccgga gtgccaatcc aggtgataga attgctcaat tactgctttt   1380
141 gccttatgca                                                           1390
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146 <212> TYPE: DNA
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152 tgaggctgaa aaaaatyaaa aaagaaaagg aatagggcat ccttttttagg agcggtcact    180
153 gtagagcctc caaaacccat tccattaact tgggaaaaaa amaactgtat ggtaaatcag    240
154 cagccgcttc caaaacaaaa rctggaggcy ttacayttat tagcaaagaa acmattagaa    300
155 aaaggacatt gagccttcat tttcgccttg gaattctgtt tgtrattcag aaaaaatccg    360
156 gcagatggcg tatgctaact gagccattaa tgccgtaatt caacccatgg gggctctccc    420
157 accccggttg ccctctccag ccatggtccc ctttaattat aattgatctg aaggattgct    480
158 tttttaccat tcctctggca aaacaggatt ttgaraaatt tgctttyacc acaccagcct    540
159 aaataataaa gaaccagcca ccaggtttca gtggaaagta ttgcctcagg gaatgcttaa    600
160 tagttcaact atttgtcagc tcaagctctg caaccagtta gagacaagtt ttcagactgt    660
161 tacatcgttc actatgttga tatttttgtgt gctgcagaaa cgagagacaa attaattgac    720
162 cgttacacat ttctgcagac agaggttgcc aacgcgggrc tgacaataac atctgataag    780
163 attcaarcct ctactccttt ccgttacttg ggaatgcagg tagaggaaag gaaaattaaa    840
164 ccmcaaaaaa atagaaataa gaaaagacac attaaaagca ttaaatgagt ttcaaaagtt    900
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167 aaagaacgtt aactccagag gcaactaaag aaattaaatt aattgaagaa aaaattcggt   1080
168 cagcacaagt aaatagaata gatcacttgg ccccactcca aattttgatt tttactactg   1140
169 cacattccct aacaggcatc attgttcaaa acacagatct tgtggagtgg tccttccttc   1200
170 ctcacagtac aattaagact tttacattgt acttggatca aatggctaca ttaattggtc   1260
171 aggaagatt atgaataata acattgtgtg gaaatgaccc agataaaatc actgttcctt   1320
172 tcaacaagca acaggttaga caagccttta tcaattctgg tgcatggcag attggtcttg   1380
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RAW SEQUENCE LISTING   DATE: 09/18/2002
PATENT APPLICATION: US/10/016,604   TIME: 09:54:41

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Output Set: N:\CRF4\09182002\J016604.raw

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178 <212> TYPE: DNA
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184 tgaggctgaa aaaaatyaaa aaagaaaagg aataggggcat ccttttttagg agcggtcact   180
185 gtagagcctc caaaacccat tccattaact tgggggaaaa aaaaamaact gtatggtaaa   240
186 tcagcagccg cttccaaaac aaaarctgga ggcyttacay ttattagcaa agaaacmatt   300
187 agaaaaagga cattgagcct tcattttcgc cttggaattc tgtttgtrat tcagaaaaaa   360
188 tccggcagat ggcgtatgct aactgagcca ttaatgccgt aattcaaccc atggggggctc   420
189 tcccaccccg gttgccctct ccagccatgg tcccctttaa ttataattga tctgaaggat   480
190 tgctttttta ccattcctct ggcaaaacag gattttgara aatttgcttt yaccacacca   540
191 gcctaaataa taaagaacca gccaccaggt ttcagtggaa agtattgcct cagggaatgc   600
192 ttaatagttc aactatttgt cagctcaagc tctgcaacca gttagagaca agttttcaga   660
193 ctgttacatc gttcactatg ttgatatttt gtgtgctgca gaaacgagag acaaattaat   720
194 tgaccgttac acatttctgc agacagaggt tgccaacgcg ggrctgacaa taacatctga   780
195 taagattcaa rcctctactc ctttccgtta cttgggaatg caggtagagg aaaggaaaat   840
196 taaaccmcaa aaaaatagaa ataagaaaag acacattaaa agcattaaat gagtttcaaa   900
197 agttgctagg agatactaat tggatttgga gatattaatt ggatttggcc aactctaggc   960
198 attcctactt atgccatgtc aaatttgtwc tctttcttaa gaggggactc ggaattaaat  1020
199 agtgaaagaa cgttaactcc agaggcaact aaagaaatta aattaattga agaaaaaatt  1080
200 cggtcagcac aagtaaatag aatagatcac ttggccccac tccaaatttt gatttttact  1140
201 actgcacatt ccctaacagg catcattgtt caaaacacag atcttgtgga gtggtccttc  1200
202 cttcctcaca gtacaattaa gacttttaca ttgtacttgg atcaaatggc tacattaatt  1260
203 ggtcagggaa gattatgaat aataacattg tgtggaaatg acccagataa aatcactgtt  1320
204 cctttcaaca agcaacaggt tagacaagcc tttatcaatt ctggtgcatg gcagattggt  1380
205 cttgccgatt ttgtgggaat tattgacaat cgttaccaca                        1420
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209 <211> LENGTH: 837
210 <212> TYPE: DNA
211 <213> ORGANISM: Homo sapiens
213 <400> SEQUENCE: 10
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215 gtcattacag tgttaacaag attttaatca gtctattaac attgtatcag attctgcata   120
216 tgtagtacag gctacaaagg atattgagag agccctaatc aaatacatta ggatgatca    180
217 gttaaacccg ctgtttaatt tgttacaaca aaatgtaaga aaawgaaatt tcccatttta   240
218 tattactcat attcgagcac acactaattt accagggcct ttaactaaag caaatgaaca   300
219 agctgacttg ctagtatcat ctgcattcat kgargcacaa gaacttcatg ccttgactca   360
220 tgtaaatgca ataggattaa aaaatatatt tgatatcaca tggaaacaga caaaaaatat   420
221 tgtacaacat tgcrcccagt gtcagattct acacctggcc actcaggagg yaagagttaa   480
222 tcccagaggt ctatgtccta atgtgttatg gcaaatggat gtcatgcacg taccytcatt   540
223 tggaaaattg tcatttgtcc aygtgacagt tgatacttat tcacatttca tatgggcaac   600
224 ctgccagaca ggagaaagta cttcccatgt yaagagacat ttattatytt gttttcctgt   660
225 catgggagtt ccagaaaaag ttaaaracaga caatgggcca ggttactgta gtaaagcagt   720
226 tcaaraattc ttaaatcagt ggaaaattac acatacaata ggaattctct ataattccca   780
227 aggacaggcc ataattgaaa gaactaatag aacactcaaa gctcaattgg ttaaaca       837
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RAW SEQUENCE LISTING   DATE: 09/18/2002
PATENT APPLICATION: US/10/016,604   TIME: 09:54:41

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Output Set: N:\CRF4\09182002\J016604.raw

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    236 <221> NAME/KEY: misc_feature
    237 <222> LOCATION: (1)..(841)
    238 <223> OTHER INFORMATION: N=A,G,C,T
    240 <400> SEQUENCE: 11
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    243 taagaacagt attagattcc attgctcatg gaaatagact tactccttat gactgggaaa     180
    244 ttttggccaa atcttccctt tcatcctctc agtatctaca gtttaaaacc tggtggattg     240
W--> 245 atggagtaca agaacaggta cgnaaaaaat caggctacta agcccactgt taatatagac     300
    246 gcagaccaat tgttaggaac aggtccaaat tggagcacca ttaaccaaca atcagtgatg     360
    247 cagaatgagg ctattgaaca agtaagggct atttgcctca gggcctgggg aaaaattcag     420
    248 gacccaggaa cagctttccc tattaattca attagacaag gctctaaaga gccatatcct     480
    249 gactttgtgg caagattaca agatgctgct caaaagtcta ttacagatga caatgcccga     540
    250 aaagttattg tagaattaat ggcctatgaa aatgcaaatc cagaatgtca gtcggccata     600
    251 aagccattaa aaggaaaagt tccagcagga gttgatgtaa ttacagaata tgtgaaggct     660
    252 tgtgatggga ttggaggagc tatgcataag gcaatgctaa tggctcaagc aatgaggggg     720
    253 ctcactctag gaggacaagt tagaacattt gggaaaaaat gttataattg tggtcaaatc     780
    254 ggtcatctga aaaggagttg cccaggctta aataaacaga atataataaa tcaagctatt     840
    255 a                                                                     841
    258 <210> SEQ ID NO: 12
    259 <211> LENGTH: 924
    260 <212> TYPE: DNA
    261 <213> ORGANISM: Homo sapiens
    263 <220> FEATURE:
    264 <221> NAME/KEY: misc_feature
    265 <222> LOCATION: (1)..(924)
    266 <223> OTHER INFORMATION: N=A,G,C,T
    268 <400> SEQUENCE: 12
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W--> 270 agcctccaaa acccattcca ttaacttggg naaaaaaana actgtatggt aaatcagcag     120
W--> 271 ncgcttccaa aacaaaanct ggaggcntta canttattag caaagaaacc attagaaaaa     180
    272 ggacattgag ccttcatttt cgccttggaa ttctgtttgt aattcagaaa aaatccggca     240
    273 gatggcgtat gctaactgag ccattaatgc cgtaattcaa cccatggggg ctctcccacc     300
    274 ccggttgccc tctccagcca tggtcccctt taattataat tgatctgaag gattgctttt     360
    275 ttaccattcc tctggcaaaa caggattttg aaaaatttgc ttttaccaca ccagcctaaa     420
    276 taataaagaa ccagccacca ggtttcagtg gaaagtattg cctcagggaa tgcttaatag     480
    277 ttcaactatt tgtcagctca agctctgcaa ccagttagag acaagttttc agactgttac     540
    278 atcgttcact atgttgatat tttgtgtgct gcagaaacga gagacaaatt aattgaccgt     600
    279 tacacatttc tgcagacaga ggttgccaac gcgggactga caataacatc tgataagatt     660
    280 caaacctcta ctcctttccg ttacttggga atgcaggtag aggaaaggaa aattaaacca     720
    281 caaaaaaata gaaataagaa aagacacatt aaaagcatta aatgagtttc aaaagttgct     780
    282 aggagatact aattggattt ggagatatta attggatttg gccaactcta ggcattccta     840
W--> 283 cttatgccat gtcaaatttg tnctctttct taagagggga ctcggaatta aatagtgaaa     900
    284 gaacgttaac tccagaggca acta                                            924
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 09/18/2002
PATENT APPLICATION: US/10/016,604   TIME: 09:54:42

Input Set : A:\SEQUENCE LISTING.ST25.txt
Output Set: N:\CRF4\09182002\J016604.raw

<u>Please Note:</u>
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:11; N Pos. 263
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Seq#:28; N Pos. 24,25,27,668
Seq#:29; N Pos. 22,23
Seq#:30; N Pos. 1,19,38,247,265,301,309,316,382,401,453,569,575,632,664
Seq#:31; N Pos. 1,743
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Seq#:33; N Pos. 19
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Seq#:34; N Pos. 702,703,704,705,706,707,716,718,719,721,722,723
Seq#:36; N Pos. 719,773
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Seq#:38; N Pos. 79,385,453,454,455,476,480,481,500,503,515,531,538,543,546
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Seq#:48; Xaa Pos. 376,408,416,418,427,438,439
Seq#:49; Xaa Pos. 125,132,153,187,197,205,223,231
Seq#:50; Xaa Pos. 12,25
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Seq#:52; Xaa Pos. 25
Seq#:53; Xaa Pos. 12,25,75
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Seq#:55; Xaa Pos. 12,25
Seq#:108; Xaa Pos. 917
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